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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,654	07/15/2003	Atsushi Ishikawa	H-720-03	5267

7590 11/30/2004

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EXAMINER
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CORRIELUS, JEAN M

ART UNIT	PAPER NUMBER
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2162

DATE MAILED: 11/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/618,654

Applicant(s)

ISHIKAWA ET AL.

Examiner

Jean M Corrielus

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 August 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 23-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 23,24 and 40-51 is/are rejected.
- 7) ☒ Claim(s) 25-39 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/15/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. This office action is response to the preliminary amendment filed on August 19, 2003, which claims 23-51 are presented for examination.

#### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) filed on July 15, 2003 complies with the provisions of M.P.E.P. 609. It has been placed in the application file. The information referred to therein has been considered by the examiner.

#### ***Drawings***

3. Applicants are required to furnish the formal drawings in response to this office action. No new matter may be introduced in the required drawings. Failure to timely submit a drawing will result in ABANDONMENT of the application.

#### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under

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37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 23 and 40-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Snavelly et al., (hereinafter "Snavelly") US Patent no. 6,772,167 and Weissman et al., (hereinafter "Weissman") US Patent 6,212,524.

As to claim 23, Weissman discloses the claimed "reading current data" (col.23, lines 47-60); "referring to a staging information table that includes information which indicates the direction of pre-reading and the data volume of pre-reading (col.22, lines 20-30, lines 43-47); and "staging the current data to a cache memory in accordance with the information referenced in the step referring to the staging information table" once the staging tables have been loaded, the semantic definitions can be accessed from the enterprise manager to convert the information in the staging tables to the predefined data semantic so that the information in the staging tables can be put into a fact tables of the datamart into the memory (col.22, lines 26-47). However, Weissman does not explicitly disclose the use of referring to a staging information table, while a current data is being read. On the other hand, Snavelly discloses the use of "staging information table, while the current data is being read" by viewing catalog items and entering transactions with action button which transfers information from staging table to production table (fig.4; col.14, lines 52-67; col.8, lines 25-32). It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the teachings of the cited references, wherein the staging information table provided therein (see

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Weissman's fig.1, item 130) would incorporate the use of referring to a staging information table, while a current data is being read, in the same conventional manner as disclosed by Snively (col.14, lines 52-67). One having ordinary skill in the art would have found it motivated to utilize such combination because that would provide Weissman's system the enhanced capability of insuring that the proper pieces of the application are invoked as appropriate.

As to claims 40-43 and 46-49, Weissman discloses the claimed "wherein said reading step is performed so that forward and backward successive data to said current data is also read when said current data is read" (col.22, lines 20-30, lines 43-47; col.11, line 47-col.17).

As to claims 44-45 and 50-51, Snively discloses the claimed "setting the pre-read staging execution flag in said staging information table in response to a command" (col.15, lines 25-65; col.16, lines 15-20).

7. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Snively and Weissman as applied to claims 23, 40-51 above, and further in view of Styczinski US Patent no. 5,708,668.

As to claim 24, Neither Weissman nor Snively discloses the claimed "generating redundant data from a plurality of data"; "managing the redundant data and the data from which the redundant data is generated as a parity group" and "restoring the current data from the redundant data and from the data from which the redundant data is generated in

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the event of a data read failure”. On the other hand, Styczinski discloses the claimed “generating redundant data from a plurality of data” having a plurality of data storage containing data and at least one data redundancy storage for containing data redundant of the data stored in the data storage (col.2, lines 20-31; col.15, lines 7-30); “managing the redundant data and the data from which the redundant data is generated as a parity group” (col.3, lines 5-21; col.14, line 65-col.15, line 5) and “restoring the current data from the redundant data and from the data from which the redundant data is generated in the event of a data read failure” (col.13, lines 12-43). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Weissman and Snively’s combined system, wherein the staging information table provided therein (see Weissman’s fig.1, item 130) would incorporate the use of managing the redundant data and the data from which the redundant data is generated as a parity group and restoring the current data from the redundant data and from the data from which the redundant data is generated in the event of a data read failure, in the same conventional manner as disclosed by Styczinski (col.2, lines 20-31; col.3, lines 5-21; col.14, line 65-col.15, line 30). One having ordinary skill in the art would have found it motivated to utilize such combination because that would provide Weissman’s system the enhanced capability of enabling the system to remain operational in the event of failure, thereby maintaining data redundancy.

***Allowable Subject Matter***

8. Claim 25-39 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Reasons for Indicating Allowable Subject Matter***

9. The following is an examiner's statement of reasons for allowance: Upon searching a variety of databases, the examiner respectfully submits that —refers to information in the staging information table indicating whether said redundant data is to be read regardless of whether the current data is successfully read-- in conjunction with all other limitations of the dependent and independent claims, are not taught nor suggested by the prior art of record (PTO-892).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for allowance.”

***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean M. Corrielus whose telephone number is (703) 306-3035. The examiner can normally be reached on Monday - Friday (12:00pm - 7:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E Breene can be reached on (703) 305-9790. The fax phone number for

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the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jean M. Corriellus

Patent Examiner

November 26, 2004